Satin Lutestring Tetheella fluctuosa (Hb.) (Lep.: Thyatiridae) oviposition

As shown by the map in Emmet & Heath (1992) *The Moths and Butterflies of Great Britain and Ireland* vol. 7(2), Satin Lutestring *Tetheella fluctuosa* has a disjunct distribution in Britain. In Scotland it is so scarce and local that even many resident lepidopterists (including myself) have never seen it there in the wild. So I was pleased when David Barbour kindly gave me a live female caught in Glen Affric, East Inverness-shire, on 29.v.2003.

The moth was a large example (maximum wingspan 42mm), strikingly patterned in sooty black and silvery white. Hoping to obtain eggs, I placed her in a roomy container with freshly cut sprigs of birch *Betula* from several different trees. A pad of cotton wool soaked in honey and water was also provided. Laying began on the night of 30 May, and the female appeared spent by 6 June. The eggs were then counted, totalling 185.

The precision with which the eggs had been placed was most remarkable, so the exact site of each egg was documented. In all, 175 eggs were placed near the tip of a serration around the edge of a birch leaf, usually singly but sometimes two together. Virtually all were on the upper surface of the leaf. The remaining ten were on leaf stalks. No eggs were laid elsewhere on the leaves, or on the birch twigs. No eggs were laid on the plastic container, its kitchen towel lining, or on the clingfilm cover.

Of the several morphologically different strains of birch provided, the female clearly preferred one with large, thick, rounded, dark green leaves that were slightly cupped, ignoring sprigs from trees with smaller, more papery, kite-shaped leaves. The ovoid eggs were pearly white (not yellow, as given in Emmet & Heath (*loc. cit.*), and surprisingly inconspicuous on the leaf. They resembled bulbous tips to the leaf's serrated teeth that were catching the light, being unrecognisable as eggs from most angles.

While it is not always safe to assume that behaviour in captivity reflects that in the wild, I would be surprised if the egg-laying precision shown by this female were not the normal habit. It is possible, however, that fewer eggs would have been laid per leaf if she had been unrestricted.

When the larvae hatched they were given birch sprigs from the female's preferred tree. There were heavy losses initially, as warned by Porter (1997. *The Colour Identification Guide to Caterpillars of the British Isles*). Most hatchlings climb, but these descended to the bottom of their container, even beneath the kitchen towel lining, where many starved to death before the problem was noticed. Once persuaded to begin feeding, rearing was straightforward. In the early instars, they fenestrated the birch leaves; later, they ate irregular holes into the leaves.

Porter (*op. cit.*) illustrates the caterpillar in its final instar, when the whitish lateral markings and dorsal freckling are distinctive. In the earlier instars these are absent, and it could easily be mistaken for the larva of Common Lutestring *Ochropacha duplaris*, except that the thoracic plate is pale in Satin Lutestring rather than black.

I am grateful to David Barbour for providing me with the parent moth.- Roy LEVERTON, Whitewells, Ordiquhill, Cornhill, Banffshire AB45 2HS.